

SPoon RIVER COLLEGE NEEDS ASSESSMENT

Conducted by the Applied Social Research Unit, Illinois State University

1. EXECUTIVE SUMMARY

To support planning for program and service provision, in 1997 Spoon River College (SRC) commissioned the Applied Social Research Unit (ASRU) of Illinois State University to conduct a comprehensive assessment of the skills, educational, and training needs existing in SRC's four-county service area. Research activities included:

- analyses of public data to develop a demographic and economic profile, projected to 2010, for SRC's service area;
- a telephone survey of businesses employing service area residents to identify skills gaps in the current workforce, skills and training needs of future workers, and opportunities for collaboration with SRC;
- a telephone survey of area households to identify current and future skills, educational, and training needs, and preferences for ways SRC could address these needs.

The results of this study project a bright future for Spoon River College. The population structure of the four-county service area indicates a market for both preparation of young people for the workplace or further education, and lifelong learning opportunities for adult residents. Employers are eager to work with SRC to develop courses and programs that will improve the quality of the area's workforce. Residents are interested in taking a wide range of work-related and personal interest-based courses and programs from SRC.

Information emerging from research activities supports the following specific observations:

- The opportunity exists for Spoon River College to *collaborate with service area employers to develop training programs in targeted skills areas*. This collaboration will take different forms depending on the needs and sizes of the businesses involved. For example, SRC could design and deliver a course meeting the specific needs of a single large firm. Alternatively, SRC could work with a group consisting of representatives of several small companies to develop a course meeting their common needs.
- Employers indicate a need for *training in personal skills* (including work ethic, self-confidence, dress, common sense, and adaptability). Residents apparently do not know that improving their performance in this area will enhance their career opportunities. By informing the public about this important skills need and offering short courses in personal skills, SRC will perform a useful service.
- Spoon River College *should develop a range of short, skills-based courses for current workers, to be offered in the evening*. Workers comprise the largest potential market for SRC's programs, and indicate that the length and scheduling of classes present the greatest barrier to utilization.
- Spoon River College should offer *courses especially designed and scheduled for homemakers and retirees*, who are less likely than workers or students to look to other providers for training.
- Spoon River College should *focus on developing and marketing general computing courses*. These skills are needed by employers and sought by area residents for both work-related and personal development purposes.
- Spoon River College should consider *closing the attendance centers in Havana and Rushville*, since the majority of area residents prefer to attend classes in Macomb and Canton.
- Spoon River College should continue to *market programs and courses by direct mail, reinforced by newspaper advertisements for the general public and sales representative contacts for employers*.

Along with other service providers, SRC faces a future that will reward flexibility and adaptability. Thinking "outside the box" of traditional degree programming, course design, and scheduling will enable the

College to successfully meet the needs of area residents, employers, and communities as they move into the 21st century.

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1. INTRODUCTION

Spoon River College (SRC) is a comprehensive community college serving the residents of four counties in West Central Illinois. Founded in 1959, the College's goals are to provide opportunities for lifelong learning; provide competency-based workforce preparation; and facilitate community service and development initiatives. Current SRC programs, courses, and services include:

- pre-baccalaureate preparation;
- vocational/technical training;
- adult basic education;
- general studies and personal development opportunities;
- student information and support; and
- educational, research, and facilities support for community activities.

Because its service area is large and its mainly rural population is widely dispersed, SRC maintains a main campus in Canton, and attendance centers in Macomb, Rushville, and Havana, Illinois.

Like other educational and community-based organizations, SRC is affected by rapid demographic, economic, social, and technological change. The programs, courses, and services appropriate for area needs in the 1980s and 1990s will be less appropriate during the first decade of the twenty-first century. Current offerings must be examined and updated or scrapped; new approaches and initiatives must be developed to address the changing skills and information needs of area residents, communities, and employers.

To support planning for program and service provision, in early 1997, SRC commissioned the Applied Social Research Unit (ASRU) of Illinois State University to conduct a comprehensive assessment of the skills, educational, and training needs existing in SRC's service area. Research activities included:

- analyses of public data to develop a demographic and economic profile, projected to 2010, for SRC's service area;
- a telephone survey of businesses employing service area residents to identify skills gaps in the current workforce, skills and training needs of future workers, and opportunities for collaboration with SRC;
- a telephone survey of area households to identify current and future skills, educational, and training needs, and preferences for ways SRC could address these needs.

The following report provides information about research design and methodology; survey results; and conclusions emerging from research.

3. RESEARCH ACTIVITIES

Spoon River College needs a wide range of information from various sources to obtain a balanced view of current and projected conditions and needs. Perspectives offered by area employers and residents are enhanced with the broader view provided by the public data.

3.1 Review of public data

Spoon River College serves Illinois Community College District 534—an area defined by school district boundaries. Thus, it would have been ideal to use data at school district or zipcode level. However, the data most pertinent for SRC decision-making is not available for those geographical units. Thus, it was decided to use the wealth of data collected and reported at county level.

Data used for this study was extracted from sources including the:

- US Censuses of Population and Housing, 1980-1990;
- US Bureau of the Census, *USA Counties* 1996;
- 1990 US Census of Population and Housing MARS data;
- 1990 Census Transportation Planning Package (CTPP);
- 1994 *County and City Data Book*;
- Illinois State Board of Education;
- Illinois Community College Board;
- Illinois Board of Higher Education;
- US Department of Defense; and
- Illinois Department of Employment Security Occupation Projections, 1992-2005.

The variables selected for data collection and analyses were chosen based on their applicability to SRC's program planning activities. To describe the market for its services, SRC must be aware of current and projected trends regarding demography; educational attainment; occupational and industry structure; employment and unemployment status; and commuting patterns among residents in its service area. In addition, to identify potential opportunities for collaboration with employers, SRC requires current and projected information about types and sizes of businesses in its service area.

3.2 Survey of area employers

To obtain information about the skills and training needs of businesses, ASRU staff members conducted a telephone survey of employers selected to represent the industrial categories (i.e., SIC codes), organizational sizes, and geographical locations in SRC's service area. Because many area residents work for companies located outside the service area, it was decided to survey large employers in counties where a significant number of area residents are employed.

Before calling began, letters were sent over SRC's president's signature, inviting companies to participate in survey interviews. (A copy of this letter appears in Appendix 2 of this report.) In addition, information about the needs assessment study was disseminated by the local media. This raised awareness of the initiative among area employers and encouraged their positive response to ASRU interviewers.

3.2.1 Contact list development

Applied Social Research Unit staff members used Dun and Bradstreet June 1996 "Marketplace" records to obtain industry and contact information for area businesses. One-hundred-ninety organizations were selected for interviews as follows:

- All businesses (14) with over 1,000 employees located in counties where at least 150 SRC area workers are employed were selected, with the exception of institutions of higher education and gambling casinos. The counties included were the four study area counties, Fulton, Mason, McDonough, and Schuyler; and, in addition, Cass, Hancock, Knox, Logan, Peoria, Sangamon, and Tazewell counties.
- All employers located in the four-county study region with between 100 and 999 employees were selected, with the exception of institutions of higher education and organizations known to have gone out of business. Added to the contact list were six organizations of particular interest to Spoon River College, yielding a total of 38 businesses in this size range.

- One hundred thirty-eight employers with between one and 99 employees were proportionately sampled by location (i.e., county within SRC's service area) and industry type.

See Table 1 in Appendix 1 for a summary of information about the employers surveyed.

3.2.2 Questionnaire development

The questionnaire used for telephone interviews with employers addressed the following issues:

- the kinds of jobs for which employers most often hire;
- the skills, knowledge, educational background, and abilities employers look for in applicants for those jobs;
- the extent to which there are enough qualified applicants for those jobs;
- the skills gaps employers encounter in applicants;
- the types of training employers think would improve applicants' skills;
- improvements employers would like to see in the educational preparation of job-seekers;
- the skills gaps and training or educational needs of current workers;
- the new skills that will be needed by future workers; and
- the extent to which the company would be interested in working with Spoon River College to improve the competencies of employees.

A copy of the interview questionnaire appears in Appendix 2 of this report.

3.2.3 Survey response

The telephone survey of employers resulted in 87 completed interviews yielding a 46 percent response rate. Interviews lasted, on average, for 30 minutes. A total of 58 businesses indicated interest in working with Spoon River College and willingness for their contact information to be shared with the College; detailed information about these organizations has been given to SRC staff.

Just over half of businesses appearing on the contact list did not participate in the survey for the following reasons:

- Twenty-seven (14%) telephone numbers were incorrect, disconnected, duplicates, or connected to fax machines.
- In 31 percent of cases (59 contacts), interviewers were unable to reach the business or the correct person for an interview.
- Only 11 (6%) contacts indicated a lack of interest in participating in the survey.
- Six contacts (3%) said the company does not hire and, thus, was unable to help with the survey.

3.2.4 Data analysis

Applied Social Research Unit staff members entered data resulting from telephone interviews with employers. Open-ended responses were numerically coded to enable statistical manipulation. Frequency distributions and crosstabulations were the statistical tools used to analyze data. The proportional-reduction-in-error (PRE) measure of association, lambda, was used to explore statistically significant associations in crosstabulations. Lambda reflects the reduction in error when values of the independent variable are used to predict values of the dependent variable.¹ Crosstabulations were calculated for all variables to explore associations between the variable and business location, industry, size of organization, and occupation. Only statistically significant and pertinent associations are presented in this report. Data analysis was performed in SPSS 7.0.

¹ G.W. Bohrnstedt and D. Knoke, *Statistics for Social Data Analysis*, Itasca, IL: F.E. Peacock, second edition (1988), p. 307.

3.3 Survey of households

To explore the extent to which SRC's programs meet the current needs of area residents and the market demand for programs not presently offered, ASRU conducted a survey of households located in the four-county study region.

3.3.1 Survey sample development

Using the services of Illinois State University's Calling Center, The Applied Social Research Unit conducted a telephone survey of 1,200 households located in SRC's service area. A simple random sample of households located in the four-county study area was selected for the survey.² Interviewers were trained and supervised by ASRU's Survey Research Manager.

3.3.2 Survey response

Calls were made to each of the 1,200 telephone numbers for households appearing on the survey contact list, with the following outcomes:

| Action/Outcome | Number | Percent |
|------------------------|---------------|----------------|
| Call attempted | 1,200 | 100% |
| Interview conducted | 394 | 38% |
| Interview refused | 350 | 35% |
| No connection achieved | 204 | 17% |
| Bad or wrong numbers | 120 | 10% |

A total of 394 interviews were conducted, for a response rate of 38 percent. Interviewees were asked for information regarding all persons in the household over age 16. Information about 675 SRC-area residents was collected.

3.3.3 Questionnaire development

The questionnaire used for interviews with area residents addressed the following issues:

- preferred location for SRC course delivery;
- types of training or education needed to improve job skills;
- preferred topics for special interest or personal development courses;
- course characteristics, conditions, or services that would make it possible for household residents to take courses from SRC; and
- extent to which household residents would consider taking a course from SRC.

A copy of the questionnaire appears in Appendix 2 of this report.

3.3.4 Data analysis

Data resulting from telephone interviews with area residents were entered in SPSS 7.0 by Applied Social Research Unit staff members. Open-ended responses were numerically coded to enable statistical manipulation. Frequency distributions for individual variables and for variables with possible multiple responses are presented. Pertinent factors revealed in exploration of interview data were further examined with more detailed frequency

² Contact information was provided by Survey Sampling, Inc..

distributions, crosstabulations, and point estimates—a specific numerical value estimate of a parameter calculated from a representative sample mean.³ Data analysis was performed in SPSS 7.0.

4. RESEARCH RESULTS

Information resulting from research activities will be reported below as follows:

- demographic and economic trends that will affect the educational and training needs of SRC service area residents;
- current and future skills and training needs of organizations employing SRC service area residents, with an emphasis on businesses located in the four-county study region;
- skills and educational needs of area residents.

4.1 Demographic and economic profile of Spoon River College’s service area

Graphs and tables providing details about demographic and economic trends occurring within the area considered by this research appear in the Demographic and Economic section of Appendix 1 in this report.

4.1.1 Population

Counties included in this study are Fulton, McDonough, Mason, and Schuyler. The total 1990 population of this area was 97,091, with more than three quarters of residents living in Fulton and McDonough counties. The major communities in SRC’s service area are Macomb, with 21 percent; Canton, with 14 percent; Havana, with four percent; and Rushville, with three percent of its population respectively. More than half of the service area’s population (58%) live outside of these communities.

Following a trend experienced by many rural areas in Illinois and elsewhere, between 1980 and 1995, the population of the four-county area decreased significantly—by more than 10 percent. Mason County lost nearly 15 percent of its 1980 population, while Fulton County witnessed a loss of nearly one in ten. The transient yet stable student population of McDonough County accounts for its comparatively low (less than six percent) percentage loss. Although population decline is expected to slow in the coming years, it is projected to continue in Fulton and Mason counties. Population is projected to remain fairly stable in McDonough and Schuyler counties.⁴

See Demographic and Economic Tables 1 through 4 in Appendix 1.

4.1.2 Age groups

Spoon River College serves an area where the majority population is within “family-cycle” age groups (ages 5-15 and 25-39), for which the dominant concerns are child-rearing and career development and enhancement. Persons between the ages of 16 and 24—traditional college age—comprise the largest single age group (approximately one-fifth of the total population) in SRC’s service area. However, this structure is actually only characteristic of McDonough County where the large number of students attending Western Illinois University push that proportion to over one-third of the County’s total population. Elsewhere, the disproportionately small numbers of people in the 16 to 24 age group indicates that college-aged people are leaving

³ A.G. Bluman, Elementary Statistics: A Step by Step Approach, Dubuque, IO: Wm. C. Brown, second edition (1995), p. 273.

⁴ In addition to the detailed data appearing in Appendix 1 of this report, see Norman Walzer and Jeff Crump, “Economic Trends in Rural Illinois,” Rural Research Report, Illinois Institute for Rural Affairs, Western Illinois University, Volume 8, Issue 3, Winter 1996-7; and W.A. Testa, T.H. Klier, and R.H. Mattoon, Assessing the Midwest Economy: Looking Back for the Future, Federal Reserve Bank of Chicago (1997) p. 59.

SRC's service area to find educational and employment opportunities elsewhere. In Fulton, Mason, and Schuyler counties, one-fifth of the population is between 25 and 39 years old, while an additional third is age 55 or older.

See Demographic and Economic Tables 5 through 14 in Appendix 1.

4.1.3 Place of birth and language spoken at home

Most of the residents of the study area were born in Illinois. This is especially true for Fulton, Mason, and Schuyler counties. In McDonough County, approximately one-fifth of residents were born outside of the state—again, reflecting the presence of a major university. Approximately five percent of persons in SRC's service area moved from outside of Illinois within the last five years. More than 3,000 area adults speak a language other than English at home. Spanish is spoken by one-quarter of these people. Most non-English speakers live in McDonough and Fulton counties.

See Demographic and Economic Tables 15 and 16 in Appendix 1.

4.1.4 Household structure

Of the 36,492 households in the region, most (68%) are family households. Only in McDonough County are a significant proportion of households (nearly two-fifths) non-family households. Approximately one-third of area households consist of families with children under age 18. Thus, a large number of area residents are interested in earning as much as possible to support growing families. They are also involved in educating their children to participate in the workforce of the future.

Only Fulton County has a significant number (1,444) of residents living in institutions. The County has both a large nursing home population and a prison housing nearly 1,000 inmates, according to 1990 figures. In other service area counties, the prison population is negligible and the number of nursing home residents is relatively small.

See Demographic and Economic Tables 17 and 18 in Appendix 1.

4.1.5 Educational attainment

Educational attainment among people living in SRC's service area is fairly consistent for Fulton, Mason, and Schuyler counties, and, as one would expect, differs for McDonough County where people are comparatively better educated. In Fulton, Mason, and Schuyler counties, more than two-thirds of adults have a high school diploma and approximately one-quarter did not finish high school. By contrast, more than half the adult residents of McDonough County have at least some college.

Data indicate that area residents continue their educations after reaching adulthood; approximately one-third of persons over age 25 have high school diplomas, while nearly two-fifths have some college. As skills demands of area employers climb, the educational attainments of area adults will increase.

See Demographic and Economic Tables 19 and 20 in Appendix 1.

4.1.6 Income and poverty

Incomes of study area residents are low compared to statewide figures. In 1989, per capita income in Illinois was \$15,201 and median household income was \$32,252. In the same year, per capita income in Fulton, McDonough, and Schuyler counties hovered around \$10,000, while in Mason County per capita income was \$11,036. Median household income in Fulton, McDonough, and Schuyler counties was between \$21,000 and \$22,000, while in Mason County it was \$22,434. These figures reflect the lower wage levels and cost of living in rural compared to urban Illinois. However, they also indicate relatively high levels of poverty. Only 12 percent of

Illinois residents were living below the poverty level in 1989, compared to 15 percent of residents of Fulton and Mason Counties, 16 percent of Schuyler County residents, and 19 percent of persons living in McDonough Counties.

A significant proportion of SRC service area residents receive benefits (Retirement, Widow/ers, Disability, and Supplemental Security Income) paid by the Social Security Administration or the Illinois Department of Public Aid (Aid to Families with Dependent Children (AFDC)). Approximately 60 percent of benefit recipients are retired persons receiving Social Security Retirement benefits.

At over 10 percent respectively, Fulton and Mason Counties have the highest proportion of AFDC recipients of the counties under consideration. This situation poses a challenge to educators, employers, and communities as Welfare recipients move into the workforce. In addition to appropriate jobs, current AFDC beneficiaries require workforce readiness and skills training and support with child care, transportation, and other services.

See Demographic and Economic Tables 21 and 22 in Appendix 1.

4.1.7 Employment and unemployment

Of the 77,704 persons over age 16 living in SRC's service area, just over half are in the workforce. Non-workers include students, homemakers, welfare recipients, the elderly, and disabled persons. People within these categories will continue to swell the ranks of those not in the workforce. However, with ongoing and escalating economic, social, and policy pressure for adults to take economic responsibility for themselves and their dependents, many will require retraining and skills upgrades to enter or re-enter the workforce.

During the past twenty years, unemployment rates have fluctuated dramatically in the service area, from a low of just over five percent in 1979 to a high of 14 percent in 1983. During the 1980s, unemployment was higher in Fulton County than elsewhere in the service area, reaching over 17 percent in 1983. In the 1990s, Mason County has consistently experienced higher unemployment than the other counties under consideration. Since 1985, McDonough County has had significantly lower unemployment than the other counties, currently (1997) experiencing a rate of just over four percent while its nearest competitor, Schuyler County, has a rate of nearly 10 percent. Furthermore, McDonough County's unemployment rate is expected to decline to just over three percent by 2001, while unemployment rates in other counties are expected to stabilize or rise.

See Demographic and Economic Tables 23 and 24 in Appendix 1.

4.1.8 Work location

Americans, both rural and urban, are becoming increasingly mobile. Rural residents are willing to travel growing distances to obtain access to the goods, services, and opportunities they want.⁵ Spoon River College service area workers are often employed in counties other than those where they live. The counties under consideration employ a larger share (between one-third and one-half of total employees) of SRC service area residents than do other counties. Between 53 (Mason and Schuyler county residents) and 88 (McDonough County residents) percent of workers in the study area live and work in the same county. However, it is noteworthy that SRC area residents commute to work in counties including Peoria, Tazewell, Knox, Cass, Logan, Hancock, Menard, and Warren, where they comprise up to 10 percent (Cass County) of the total workforce.

Residents in service area counties display different commuting patterns. For example, 15 percent of Fulton County workers commute to Peoria County, while only seven percent of Mason and McDonough county workers, and only one percent of Schuyler County workers are employed in Peoria County. By contrast, 12 percent of Mason County workers commute to Tazewell County, while only six percent of Fulton County workers and insignificant numbers of other service area county workers are employed there.

See Demographic and Economic Tables 25 through 31 in Appendix 1.

4.1.9 Occupations and job openings

The Illinois Department of Employment Security provides estimates of the annual number of job openings within occupations represented in SRC's service area. Comparison with data regarding area residents' occupations supports the following observations:

- The largest number of annual openings are in food and beverage preparation and service (219); marketing and sales (165); administration support including clerical (118); agriculture, forestry, and fishing (115); teaching, counseling, and library (108); and managerial and management related

⁵ See Community Research Services, Illinois State University, "Rural Life Panel 1995: Summary Report," Illinois Institute for Rural Affairs, Western Illinois University, Vol. 6, Issue 1, July 1995; Community Research Services, "Coming of Age in Rural Illinois," Illinois Institute for Rural Affairs, Western Illinois University, Volume 6, Issue 3, April 1996.

(105) occupations. Openings in other occupations are projected at 37 openings or fewer per year. This information must be carefully considered, since combining two or more categories results in identification of a greater need within certain industries than might otherwise be identified. For example, there are 37 projected annual openings for people working in health diagnosis and treatment and 25 openings in health service occupations; thus, there is considerable annual demand for employees in health-related occupations.

- Generally speaking, more SRC area residents are employed in all occupational areas than there are openings. The exception is in agriculture, where there are more projected annual openings than resident workers.
- Data presented concerns relative demand for occupations within the four-county study region only. Commuting data indicates that SRC area residents regularly commute for work in counties outside the study area.

This information suggests that, in some respects, the area displays the national trend for growth in service occupations at both the top and bottom of the pay and education scale. Spoon River College will be well advised to further develop program options targeting these occupations. Occupational data also indicate an ongoing need for economic development with creation of new jobs if area workers are not to continue to leave the four-county area to find work.

See Demographic and Economic Tables 37 through 43 and Tables 32 through 36 in Appendix 1.

4.2 Employer survey results

Businesses employing SRC service area residents and located in eleven central Illinois counties were surveyed to identify skills shortages and training needs among job applicants and current workers. Results of telephone interviews conducted in March and April 1997, are discussed below. Graphical presentation of data emerging from interviews appears in Appendix 1 of this report.

4.2.1 Survey population

A total of 87 employers participated in the telephone survey conducted by ASRU staff members. One-third of the organizations represented in survey results are located in McDonough County; 30 percent are in Fulton County; approximately one-sixth are in Mason County; and fewer than one in ten are located in Peoria, Sangamon, Schuyler, Tazewell, Cass, and Knox counties. See Employer Survey Table 2 in Appendix 1.

Best represented among industry classifications were service providers (37%), retail traders (17%), and manufacturers (15%). Other industries included were public administration (8%); transportation and communications (7%); wholesale trade (6%); agriculture (6%); finance, insurance, and real estate (3%); and mining (1%). See Employer Survey Table 3 in Appendix 1.

The majority of surveyed businesses are small. Nearly one-third employ fewer than 10 people, one-fifth employ between ten and 49 staff members, and 12 percent employ between 50 and 99 workers. Information provided by these firms is helpful because experts agree that most job growth in the near future will be in small organizations.⁶ See Employer Survey Table 3 in Appendix 1.

Interviewees providing information about the organizations participating in the survey indicated their titles or positions as follows:

| Title or position description | Number | Percentage |
|---|--------|------------|
| Owner, partner, president or vice president | 25 | 29% |

⁶ Gene Koretz, "Small Businesses Putting Snap in the Job Market," *Business Week*, April 2, 1994, quoted in B. Nickels and J. and S. McHugh, *Understanding Business*, Chicago: Irwin, fourth edition (1996), p. 184.

| | | |
|---|----|-----|
| Human Resources, training, or personnel | 18 | 21% |
| Manager or director | 13 | 15% |
| Professional staff | 11 | 13% |
| Principal, pastor, warden, or sheriff | 9 | 10% |
| Support staff | 7 | 8% |
| Board member or special administrator | 2 | 2% |
| Other | 2 | 2% |

4.2.2 Skills and training needs

More than three-quarters of the employers surveyed hire for either one (53%) or two (25%) jobs most frequently. The larger the firm, the more types of positions are regularly filled. Thus, one-third of firms with between 200 and 499 employees most often hire for four types of positions, while three-quarters of the firms with 500 or more employees most frequently hire for three types of positions.

Over half of the jobs employers fill most often are white-collar positions, many of which require education or training beyond high school.⁷ The largest number of these jobs are in marketing and sales, closely followed by administrative support/clerical positions. Next in demand, with nearly one-third of responding companies most often hiring them, are blue collar workers, led by laborers/helpers—a type of position regularly filled by more than one-tenth of interviewees. Finally, 16 percent of the positions most often filled by surveyed employers are service jobs, including health, protective, personal, and industrial cleaning and building service positions.

Predictably, the types of jobs most frequently filled are significantly associated with industrial categories. Thus, all manufacturers most frequently hire people to do assembly; over one-half of agricultural firms and 23 percent of manufacturers surveyed most often hire laborers; retailers, service providers, and public administration organizations are equally eager to hire managers; and most industries regularly hire for administrative support positions.

Why are some occupations more often filled by employers than others? Over half of the positions mentioned by surveyed employers are frequently filled because of *turnover*. Just over one-quarter are often filled because of organizational *expansion*, while just under one-quarter are often hired for because of *retirements*. Only six percent of positions are filled because of *skills deficiencies* in employees. Turnover, expansion, and skills deficiencies do not vary by occupational group. Retirement is a significant factor in hiring health diagnosis and treatment workers; teachers, librarians, and counselors; and protective services workers. See Employer Survey Table 2 in Appendix 1.

⁷ For a discussion of the relationship between education, skills, and earnings, see R. Judy and C. D'Amico, Workforce 2020: Work and Workers in the 21st Century, Indianapolis, IN: Hudson Institute (1997). For information about the educational preparation expected for good jobs, see R.L. Krannich and C.R. Krannich, The Best Jobs for the 1990s and into the 21st Century, Manassas Park, VA: Impact Publications (1993, 1995).

What kinds of skills do businesses employing SRC-area residents seek in job applicants? Survey interviewees' responses were tabulated within the following broad skills categories:

| Skill Category | Percent of All Responses |
|-----------------------|---------------------------------|
| Personal | 61% |
| Interactive | 44% |
| Math | 27% |
| Computer | 24% |
| Analytical | 19% |
| Learning/memory | 18% |
| Job training | 18% |
| Technological | 17% |
| Language | 16% |
| Physical | 13% |
| Mechanical | 10% |
| Educational | 6% |
| Perceptual | 4% |
| Artistic | 3% |
| Balance | 2% |
| Agriculture-related | 1% |

See the Skills and Education Taxonomy, Employer Survey Table 7, in Appendix 1 for a detailed breakdown of specific skills included within these categories.

Personal attributes, such as adaptability, attitude, confidence, character, dependability, motivation, dress (self-presentation), stress tolerance, and orientation to work, were important to area employers across the board, as were interactive and technical skills. However, some skills are more in demand in some counties than in others. For example, computer, analytical, learning, perceptual, and artistic skills were mentioned more often by employers located in Fulton and McDonough counties. Education was most important to Fulton County employers, but was also valued by employers in McDonough and Mason Counties. Job experience, technical, and physical skills were more important to McDonough and Mason county employers than to those located elsewhere. Mechanical skills were most important to Mason County employers.

Predictably, different skills were prized by employers representing different industries. For example, in order of importance, agricultural employers valued personal, physical, job training, and mechanical skills, while public administration employers sought interactive, learning/memory, and analytical skills in prospective staff members. Furthermore, employers in different industries

placed different priorities on the same skills. Thus, while both retailers and financial services employers reported looking for the same skills, they ranked these skills as follows:

| <u>Retail</u> | <u>Financial Services</u> |
|----------------|---------------------------|
| 1. personal | 1. computer |
| 2. interactive | 2. technical |
| 3. math | 3. interactive |
| | 4. math |
| | 5. personal |

Company size also affected the relative importance of skills. Generally speaking, personal and interactive skills were more important to interviewees representing smaller firms with less than 50 employees, while higher-level skills, such as math and language, as well as education itself, had greater value for larger firms.

In addition, the relative importance of the skills under consideration is associated with occupational categories. For example, for marketing and sales people, most important were personal, interactive, and math skills; for health service workers, learning and memory, personal, and interactive skills were stressed; and for assembly workers, computer, language, math, and technical skills were most important.

How much education or training do employers expect in job applicants? Overall, over one-third of surveyed employers seek a high school diploma or GED certificate; 16 percent require state-regulated skills certification; one-tenth seek a bachelor's degree; and more than one-quarter require no educational qualifications. Employers' expectations regarding educational and/or training attainment vary by occupation, industry, and organizational size. See Employer Survey Table 8 in Appendix 1 for detailed findings by occupations for which employers seek persons with an associate degree.

How difficult is it for employers to find qualified applicants for job openings? This challenge varies according to occupational group. Interviewees employing marketing and sales people, protective service workers, and laborers report there are always enough qualified applicants for openings in their firms. Employers of administrative support and marketing and sales people rarely have trouble finding qualified applicants. However, employers of teachers, librarians, and counselors say that only sometimes or rarely are there qualified applicants for openings, while interviewees employing health service workers, mechanics, and transportation or vehicle operators report they always have difficulty finding qualified applicants. See Employer Survey Table 9 in Appendix 1.

It is noteworthy that, across the board, the major shortcomings in job applicants identified by employers are associated with personal characteristics. (See Employer Survey Table 10 in Appendix 1.) However, organizational size is related to skills shortfalls identified by interviewees. For example, only firms with between 200 and 499 employees report applicants often have insufficient education. Organizations with under 100 employees indicate interactive skills are lacking in many job-seekers. Applicants to companies with more than 10 employees often lack previous work experience. The largest companies, with over 500 employees, are most concerned about shortfalls in basic language and math skills.

A related issue is ***the improvement in educational preparation employers would like to see in job-seekers***. Nearly half of those interviewed would like to see improvement in a wide range of personal skills; over one-third respectively would value improvements in language (reading, writing, and English) and specific job-related (apprenticeship, vocational training, and internship) skills; 28 percent would like to see an improvement in interactive (communication, customer service, sales, and teaching) skills; and 23 percent recommend improvement in learning and memory skills. It is noteworthy that only six percent of employers indicated a need for improvement in computer skills; among this group, most (43%) would value general personal computer skills, while 29 percent were interested in data entry and keyboarding skills. See Employer Survey Table 10 in Appendix 1.

Location of business organization was associated with the improvements in educational preparation recommended by employers. Most important to Fulton and McDonough county employers were personal skills; Mason County employers would most like to see improvement in language skills, while Schuyler County employers would value improvement in learning and memory skills. Organizational size was also a factor, although personal skills, work experience, and language skills were most important overall.

Suggestions for improvements in educational preparation varied according to industry. However, generally speaking, most interviewees focused on basic, communications, and personal skills. For example, agricultural employers were most interested in seeing improvement in interactive skills, followed by language ability and experience. Manufacturers suggested improvement in language, learning and memory, and technical preparation. Wholesalers and retailers stressed the need for better math skills.

Employers are also concerned about *skills needs among current workers*. One-quarter of employers say workers need to improve their computer skills, specifying general PC, general computer, on-line retrieval, specialized programming, word-processing, and spreadsheet skills. An almost equal number indicate workers are deficient in interactive skills, specifying customer service and communicating with others as areas of special need. Fourteen percent of employers report that workers would benefit from improving their personal skills. See Employer Survey Table 10 in Appendix 1.

There are some differences in current workers' reported skills deficiencies in different industries. While most identify a need for computer skills, farmers report a need for improvement in interactive and job training skills; manufacturers are most concerned about technical and language skills; and interactive skills are of paramount importance in the fields of financial services, education, and public administration.

In addition, organizational size is associated with employers' identification of skills needs among current workers. Very small companies, with fewer than nine staff members, report the greatest need for computer and personal skills. Firms employing between 10 and 199 people are most concerned about interactive and computer skills. Organizations with between 200 and 499 employees identify a need for improvement in basic language and math abilities, as well as personal and technical skills. The largest companies report a need for improvement in computer, interactive, learning, and mechanical skills.

Which occupations and skills are likely to be most in demand in the near future? Interviewees predict the greatest need for marketing and sales people (mainly cashiers and clerks) and teachers (mainly teacher aides). However, there will also be a significant need for computer programmers, laborers, managers, health service workers, and administrative support personnel. In terms of skills, employers predict the greatest need for computer (programming and on-line retrieval) and interactive (communication and customer service) abilities. See Employer Survey Table 10 in Appendix 1.

What do employers say about how training should be delivered? Generally speaking, employers prefer training delivered in the form of short programs, seminars, semester-long courses, and on-the-job instruction. They tend to be least enthusiastic about complete degrees. However, there are some interesting differences in their responses about training for job applicants and training for current workers. They are more strongly in favor of semester-long courses and on-the-job training for job applicants; for current workers, they favor short programs and seminars.

There are no significant differences in preferences regarding the *form* of training by location, industry, organizational size, or occupational group. Details of the interesting differences according to the skills to be trained appear in Employer Survey Table 11 in Appendix 1 of this report.

4.2.3 Opportunities for collaboration with Spoon River College

To what extent are surveyed employers interested in working with Spoon River College to develop training programs? Approximately one-quarter of interviewees are not interested in collaborating with SRC to

develop training programs. Reasons for this lack of interest include distance, existing relationships with other providers, and the existence of in-house training programs. See Employer Survey Table 12 in Appendix 1.

Among the three-quarters of interviewees indicating an interest in working with SRC, barriers to collaboration remain. One-quarter mentioned that there is little time to devote to such an initiative. One-tenth indicated that SRC should “work through employees, not the company” to deliver skills training. However, approximately one-quarter indicated an interest in either specific courses (statistical process control, safety, fitness) or relevant, flexible training. See Comments in Appendix 3.

How can Spoon River College best reach employers to develop collaborative relationships and provide services? Three-quarters of interviewees agree that direct mail marketing is an effective approach. However, 22 percent also suggest personal contact made by a sales representative, and an additional 17 percent suggest contact by fax. Seventeen percent also suggest advertising courses and services in the newspaper. See Employer Survey Table 13 in Appendix 1.

4.3 Household survey results

To collect information about the skills, educational, and training needs of residents, a telephone survey of households located in the four-county study area was conducted in April, 1997, by staff members of Illinois State University’s Calling Center under the supervision of ASRU’s Survey Research Manager. Results of telephone interviews are discussed below. Detailed analyses of data emerging from interviews appear in Appendix 1 of this report.

4.3.1 Survey population

Households represented in the survey were located in proportion to populations of SRC service area counties:

| County | Percentage of SRC service area total population | Percentage of households responding to the survey |
|---------------|--|--|
| Fulton | 39% | 42% |
| McDonough | 36% | 35% |
| Mason | 17% | 15% |
| Schuyler | 8% | 8% |

Respondents were asked about the skills, training, and educational needs of all people over the age of 16 living in the household for at least three months out of the year. In addition to themselves, interviewees talked about the needs of their husbands (20%), wives (8%), children (8%), siblings (10%), parents (3%), and friends or other relatives living in the household (1%). Most (88%) of the households participating in the survey are composed of between one and three people aged 16 or over. The majority of people whose experiences and needs were discussed (46%) are between the ages of 31 and 54. A significant number (17%) are over age 65. Sixteen percent are between 16 and 24 years of age, while only six percent are aged 25 to 30. See Household Survey Table 1 in Appendix 1.

Members of surveyed households are somewhat better educated than residents of the service area in general. For example, one-third of household members, compared to approximately two-fifths of the general population, have high school diplomas; more than one-quarter of household members, compared to one fifth of the general population, have some college; and 14 percent of household members, compared to less than 10 percent of the general population, have bachelor’s degrees. One-third of members of households responding to the survey have taken a class at Spoon River College.

The majority of residents of surveyed households (57%) work for an employer; only six percent are self-employed. Sixteen percent are retired, and 13 percent are students. Remaining residents are described as

homemakers (7%) and volunteers (1%). People represented in the survey are involved in a broad range of occupations, with over one-half holding white-collar positions, just over one-third having blue-collar jobs, and 15 percent being employed in service work. See Household Survey Table 1 in Appendix 1.

4.2.2 Skills and training needs

This study was concerned with three kinds of training and educational needs among residents of SRC service-area households:

1. training to improve job skills;
2. training necessary to obtain a new job; and
3. education about a topic of personal interest.

Groups providing the information discussed below are identified as:

- workers;
- homemakers;
- retirees;
- students;
- people wanting new or different work; and
- all individuals represented in the survey.

The categories of workers, homemakers, retirees, and students are mutually exclusive; the group of people wanting new or different work includes some members of these other groups.

What kind of training do area residents need to do their jobs better? Overall response indicates the greatest need for skills training (35%) and degrees (22%). Only students (58%) and people wanting new or different work (32%) indicate a significant interest in degrees. Among surveyed residents wanting degrees to improve work performance or career options, most want graduate degrees (52%) and associate's degrees (21%); nearly one-fifth do not know the type of degree they need. Current workers are most interested in bachelor's degrees (35%) and associate's degrees (21%).

Almost one-half of workers say they need no additional training to improve their current work performance. However, compared to the 11 percent who want degrees, over one-quarter are interested in training in a specific skill, and six percent want certification in targeted competencies.

See Household Survey Tables 2 and 3 in Appendix 1.

What kinds of skills are needed by people who are not currently working? As indicated above, more than one-third (37%) of area residents whose needs are considered in this report are not in the workforce. An estimated 5,451 are homemakers, more than one-third of whom would like to be working outside the home. Homemakers tend to be interested in skills, rather than certificates or degrees. The desired skills most frequently mentioned by homemakers were computer (60%), language (20%), and secretarial or bookkeeping (20%) skills. It is significant that almost one-fifth of service-area homemakers wanting employment do not know the kind of training they need to get the jobs they desire. See Household Survey Table 4 in Appendix 1.

Sixteen percent of the survey population are retired. Few of these people (13%) would like to be working outside the home. Of this group, one-third did not know what kind of job training they need, while an additional 22 percent indicated a need for skills training.

Thirteen percent of area residents surveyed are students, most of whom live in Fulton and McDonough counties. The majority (60%) are studying for degrees that will qualify them for the jobs they want. Most (60%) are working on bachelor's degrees, with an additional 16 percent working on graduate degrees and seven percent

seeking associate's degrees. Many (16%) students have either not yet decided on a career or feel they need training in specific job skill. About half of the students included in this study would attend SRC if the appropriate classes were offered. See Household Survey Table 3 in Appendix 1.

In which work-related skills do area residents want training or education? Predictably, area residents are most eager for training in computer skills. Over one-half of workers wanting to up-grade their job skills are interested in computer training, with the highest demand (65%) for training in general computer skills and the other major demand (19%) for word-processing training. Over half of people wanting new or different work are also interested in computer training. One-tenth of workers are interested in management and accounting training, and seven percent want training in mechanical skills (mainly in the areas of automobile repair and electrical work.). An additional seven percent, composed of equal numbers of blue- and white-collar workers, indicate an interest in job training in general.

Area workers who want degrees are most interested in health sciences (21%) and education (14%), although many (28%) are unsure of the discipline they want degrees in. Over one-half of those interested in health sciences indicate they want associate's degrees. The seven percent of workers interested in accounting or finance qualifications did not know the kind of degree they needed. Students are most interested in degrees in business (17%) and criminal justice (17%).

Area residents interested in certification are mainly interested in health sciences (39%) and mechanical (18%) occupations. However, there was also significant interest in teacher's aide certification (13%).

See Household Survey Tables 5 through 7 in Appendix 1.

Which subjects would area residents like to learn out of personal interest? Spoon River College service area residents who are currently employed would like to take classes in many areas of personal interest that are not necessarily related to job skills. General computer skills were most popular among all groups, accounting for 22 percent of all responses. Crafts were mentioned by eight percent of interviewees, followed by woodworking (6%), sports and recreation (6%), farming (4%), and photography (4%).

Homemakers and retired people indicated particular interests. Both groups are enthusiastic about general computer skills courses, which appealed to 31 percent of home makers and 20 percent of retirees. More than one-tenth of homemakers want to take fine arts and painting classes, while 28 percent of homemakers and 16 percent of retired people are interested in learning crafts. Thirteen percent of retirees would like to take courses in woodworking and sports and recreation.

See Household Survey Table 8 in Appendix 1.

4.3.3 Market for Spoon River College services

To what extent are area residents interested in taking courses at Spoon River College? Approximately one-fifth of residents are unlikely to take advantage of SRC's work training services for the following reasons:

- already attending another university (30%);
- desired class or degree *level* is not available at SRC (21%);
- desired classes are not available at SRC (17%);
- lack of interest (13%);
- too far to travel (13%); and
- past experience with SRC was not good (4%).

Three-quarters of surveyed residents said they "would consider getting work training at Spoon River College," while an additional 28 percent indicated a possible interest.

Reasons keeping respondents from taking classes at SRC in topics of personal interest included:

- too old or ill (20%);
- lack of interest (18%);
- lack of time (18%);
- already attending another university (15%); and
- too far to travel (10%).

More than half of residents surveyed indicated willingness to take personal interest courses at SRC.

It is noteworthy that respondents' enthusiasm about attending SRC programs or courses varied according to their interest in skills training, certification, and degrees. People wanting degrees showed the least interest in taking courses at SRC, while those interested in skills training were most enthusiastic about the possibility of taking courses at SRC. Furthermore, retirees and homemakers are most enthusiastic about taking personal interest courses at SRC, while, at 71 percent, homemakers are also most interested in getting work-related training at SRC.

See Household Survey Tables 9 through 13 in Appendix 1.

Which attendance center are residents most likely to use? More than four-fifths of residents interested in taking classes from SRC would go to the attendance centers located in Canton (41%) and Macomb (41%). Only 14 and 11 percent, respectively, would take classes in Havana and Rushville. Predictably, interviewees indicated most interest in using attendance centers in their counties of residence. However, this tendency was most pronounced for McDonough County residents, 96 percent of whom would prefer to take classes in Macomb. Over one-quarter of Mason County residents were most likely to attend classes in Canton, while among Schuyler County residents, 27 percent would go to Macomb, while 14 percent would go to Canton. See Household Survey Table 13 in Appendix 1.

What would make it possible for area residents to take courses at Spoon River College? Overall, interviewees indicated that the best things SRC could do to make it possible for them to participate in courses and programs are to offer:

- shorter length classes or programs;
- classes at more convenient times;
- financial help, including scholarships, loans, waivers, and work study; and
- information about classes or programs being offered.

Most residents (49%) say evening courses are more appealing to them; just over one-quarter prefer weekday scheduling. By contrast, only 18 percent of retirees want to take classes at night, while over half prefer weekdays.

However, factors enabling people to take courses at SRC vary according to the group concerned. Most important to workers is the time courses are offered; 61 percent say evenings are the most convenient time for them to take classes. Of secondary importance to this group is financial help and information about the courses available. By contrast, the most important factor for retirees and homemakers is the duration of courses; more than half of the members of these groups say shorter courses or programs are most appealing. Financial aid and information about course offerings are important to homemakers, while retirees find that their own health and age have a more significant impact on whether or not they will take courses.

See Household Survey Tables 10, 14, and 15 in Appendix 1.

How do people find out about Spoon River College's programs? The most common ways to get information about SRC courses and programs are mail (48%) and newspaper (39%). The majority of residents say

that mail (64%) is the best way of providing information about College activities, with newspaper (41%) coming second. See Household Survey Table 16 in Appendix 1.

5. CONCLUSIONS AND RECOMMENDATIONS

The results of this study project a bright future for Spoon River College. The population structure of the four-county service area indicates a market for both preparation of young people for the workplace or further education, and lifelong learning opportunities for adult residents. Employers are eager to work with SRC to develop courses and programs that will improve the quality of the area's workforce. Residents are interested in taking a wide range of work-related and personal interest-based courses and programs from SRC.

Information emerging from research activities supports the following specific observations:

- The opportunity exists for Spoon River College to *collaborate with service area employers to develop training programs in targeted skills areas*. This collaboration will take different forms depending on the needs and sizes of the businesses involved. For example, SRC could design and deliver a course meeting the specific needs of a single large firm. Alternatively, SRC could work with a group consisting of representatives of several small companies to develop a course meeting their common needs.
- Employers indicate a need for *training in personal skills* (including work ethic, self-confidence, dress, common sense, and adaptability). Residents apparently do not know that improving their performance in this area will enhance their career opportunities. By informing the public about this important skills need and offering short courses in personal skills, SRC will perform a useful service.
- Spoon River College *should develop a range of short, skills-based courses for current workers, to be offered in the evening*. Workers comprise the largest potential market for SRC's programs.
- Spoon River College should offer *courses especially designed and scheduled for homemakers and retirees*, who are less likely than workers or students to look to other providers for training.
- Spoon River College should *focus on developing and marketing general computing courses*. These skills are needed by employers and sought by area residents for both work-related and personal development purposes.
- Spoon River College should consider *closing the attendance centers in Havana and Rushville*, since the majority of area residents prefer to attend classes in Macomb and Canton.
- Spoon River College should continue to *market programs and courses by direct mail, reinforced by newspaper advertisements for the general public and sales representative contacts for employers*.

Along with other service providers, SRC faces a future that will reward flexibility and adaptability. Thinking "outside the box" of traditional degree programming, course design, and scheduling will enable the College to successfully meet the needs of area residents, employers, and communities as they move into the 21st century.